



PATENT

Docket No. 203PR07071-US-CIP2

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: Larry F. Rhodes et al.

Art Unit No.: 1713

Serial No.: 10/614,502

Examiner:

Filed: July 7, 2003

Date: April 7, 2004

For: **PHOTO-IMAGEABLE COMPOSITIONS OF NORBORNENE AND  
ACRYLATE COPOLYMERS AND USE THEREOF**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

CERTIFICATE OF MAILING

Sir:

The undersigned hereby certifies that the attached **INFORMATION DISCLOSURE STATEMENT, FORM PTO-1449, AND SIX (6) REFERENCES** were mailed to the Commissioner for Patents, Alexandria, VA 22313-1450, with sufficient first-class postage, no special handling, on April 7, 2004, before 5:00 PM, thereby ensuring that such document(s) will be in the hands of the U.S. Postal Service by the close of business this day.

Respectfully submitted,

HUDAK SHUNK & FARINE CO., L.P.A.

By: Joyce M. Spencer  
Joyce M. Spencer

2020 Front St., Suite 307  
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330-535-2220  
Attorney Docket No. 203PR07071-US-CIP2

Practitioner's Docket No. 203PR07071-US-CIP2

**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Inventor's application of: Larry F. Rhodes et al.

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**INFORMATION DISCLOSURE STATEMENT**

Sir:

This invention relates generally to photo-imageable compositions encompassing copolymers prepared from norbornene-type and acrylate-type monomers, and more specifically, to the use of such photo-imageable copolymers in providing pattern transfer to an underlying layer(s).

As authorized and encouraged under 37 C.F.R. §1.97-1.99, applicant hereby cites as a means of complying with the duty of disclosure set forth in 37 C.F.R. §1.56, the following patents and/or documents, which the Examiner should consider with respect to the above-identified U.S. patent application:

U.S. DOCUMENTS		
PATENT/DOCUMENT NO.	DATE	INVENTOR(S)
3,697,490	October 10, 1972	Starmer
4,849,488	July 18, 1989	Starzewski et al.
6,034,259	March 7, 2000	Brookhart et al.
6,057,466	May 2, 2000	Starzewski et al.
FOREIGN DOCUMENTS		
DOCUMENT NO.	DATE	COUNTRY
0 837 079	April 22, 1998	EP
04063810 (with translation)	February 28, 1992	JP
PUBLICATIONS		
"Block Copolymers by Transformation of Living Ring-Opening Metathesis Polymerization into Controlled/"Living" Atom Transfer Radical Polymerization", S. Coca, Hyun-jong Paik, K. Matyjaszewski, <i>American Chemical Society, Macromolecules</i> , 1997, Chapter 30, pages 6513-6516.		
"Mechanistic Studies of the Palladium-Catalyzed Copolymerization of Ethylene and $\alpha$ -Olefins with Methyl Acrylate", S. Mecking, L. Johnson, L. Wang, M. Brookhart, <i>American Chemical Society Publication</i> , 1998, Chapter 120, pages 888-899.		
"New Catalysts for the Polymerization and Copolymerization of Functional Olefins", Ayusman Sen, <i>Polymeric Materials: Science &amp; Engineering</i> , 2001, 84, page 321.		
"Neutral Palladium Complexes as Catalysts for Olefin-Methyl Acrylate Copolymerization: A Cautionary Tale", G. Tian, H. Boone, B. Novak, <i>American Chemical Society, Macromolecules</i> , 2001, Chapter 34, pages 7656-7663.		

As this application was filed after June 30, 2003, only copies of the foreign documents and publications are included for the express purpose of providing the Patent and Trademark Office with an ample opportunity to evaluate the same and to arrive at an independent assessment of their materiality, if any, with regard to the examination of the application.

In reviewing the enclosed copies of the above publications, the Examiner is requested to ignore any underscoring or highlighting which may appear because such markings may or may not

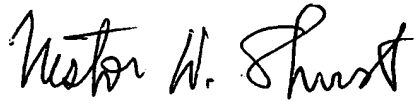
have any relationship to the subject matter of the above-identified application. The copies being submitted with this Information Disclosure Statement are the best copies available at this time.

An examination of the present application considering the above documents is requested.

The Commissioner is hereby authorized to charge any fees that might be required or credit any overpayment of fees with regard to this document to Account No. 08-3150.

Respectfully submitted,

HUDAK SHUNK & FARINE CO., L.P.A.

A handwritten signature in black ink, appearing to read "Nestor W. Shust". The signature is fluid and cursive, with the first name "Nestor" being more prominent.

Nestor W. Shust  
Reg. No. 23,034

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Attorney Docket No. 203PR07071-US-CIP2



Sheet 1 of 2

Form <b>PTO-1449</b> U.S. Department of Commerce Patent and Trademark Office <b>LIST OF PRIOR ART CITED BY APPLICANT</b> (Use several sheets if necessary)				Atty. Docket No.: 203PR07071-US-CIP2		Serial No.: 10/614,502	
				Applicant: Larry F. Rhodes et al.			
				Filing Date: 07/07/2003		Group: 1713	
<b>U.S. PATENT DOCUMENTS</b>							
*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing date if appropriate
	AA	3,697,490	Oct. 10, 1972	Starmer			
	AB	4,849,488	July 18, 1989	Starzewski et al.			
	AC	6,034,259	March, 7, 2000	Brookhart et al.			
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	AE						
	AF						
	AG						
	AH						
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	AK						
<b>FOREIGN PATENT DOCUMENTS</b>							
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	AL	0 837 079	April 22, 1998	EP			X
	AM	04063810	Feb. 28, 1992	JP			X
	AN						
	AO						
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<b>OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)</b>							
	AR		"Block Copolymers by Transformation of Living Ring-Opening Metathesis Polymerization into Controlled/"Living" Atom Transfer Radical Polymerization", S. Coca, Hyun-jong Paik, K. Matyjaszewski, <i>American Chemical Society, Macromolecules</i> , 1997, Chapter 30, pages 6513-6516.				
	AS		"Mechanistic Studies of the Palladium-Catalyzed Copolymerization of Ethylene and $\alpha$ -Olefins with Methyl Acrylate", S. Mecking, L. Johnson, L. Wang, M. Brookhart, <i>American Chemical Society Publication</i> , 1998, Chapter 120, pages 888-899.				
EXAMINER				DATE CONSIDERED			
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

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FOREIGN PATENT DOCUMENTS							
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	AP						

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)			
	AR		"New Catalysts for the Polymerization and Copolymerization of Functional Olefins", Ayusman Sen, <i>Polymeric Materials: Science &amp; Engineering</i> , 2001, 84, page 321.
	AS		"Neutral Palladium Complexes as Catalysts for Olefin-Methyl Acrylate Copolymerization: A Cautionary Tale", G. Tian, H. Boone, B. Novak, <i>American Chemical Society, Macromolecules</i> , 2001, Chapter 34, pages 7656-7663.

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